Amendments to the Specification:

Please replace paragraph beginning on page 5, line 18 with the following amended paragraph:

The reconfigurable processor core 150 can include one or more processors 151 such as MIPS processors and/or one or more digital signal processor (DSPs) 153, among others. The reconfigurable processor core 150 has a bank of efficient processors 151 and a bank of DSPs 153 with embedded functions. These processors 151 and 153 can be configured to operate optimally on specific problems and can include buffers on the receiving end and buffers on the transmitting end ~~such the buffers shown in FIG. 1~~. For example, the bank of DSPs 153 can be optimized to handle discrete cosine transforms (DCTs) or Viterbi encodings, among others. Additionally, dedicated hardware 155 can be provided to handle specific algorithms in silicon more efficiently than programmable processors 151 and 153. The number of active processors is controlled depending on the application, so that power is not used when it is not needed. This embodiment does not rely on complex clock control methods to conserve power, since the individual clocks are not run at high speed, but rather the unused processor is simply turned off when not needed.

Please replace paragraph beginning on page 11, line 6 with the following amended paragraph:

FIG. 2B shows an exemplary second process to bond cellular channels and Bluetooth or WLAN channels together to further increase transmission speed for the system of FIG. 2A. The process receives a request to communicate one or more files with a data transmission size (step 212). Based on the transmission size and known cellular and Bluetooth or WLAN channel bandwidth, the process 210 computes the number of frequency channels that are needed (step 214). Next, the process 210 requests an allocation of cellular frequency channels from a mobile station to a base station (step 216). In response, the base station looks up available (open) frequency channels in its memory storage and allocates available frequency channels in response to the request from the mobile station (step 218). Information on the allocated channels is sent to the mobile station to set up its transceiver to capture data on all allocated channels (step 220). Once the mobile station sends an acknowledgement that it has set up its RF circuitry to receive data over a plurality of frequency channels, the base station can transmit data over the plurality of frequency channels and the Bluetooth or WLAN channel (step 224). In this manner, the allocated frequency channels are bonded together to communicate data with high bandwidth using a plurality of long-range and short-range wireless channels. Upon conclusion of data

transmission, the mobile station sends a deallocation request to the base station (step [[326]] 226), and turns off the Bluetooth or WLAN channel (step [[328]] 228). The base station in turn releases the deallocated channels for other transmissions (step [[330]] 230).